

## REMARKS

Claims 14 and 16 have been canceled and new claims 18 and 19 (directed to the elected invention) have been added. Thus, claims 1, 7, 15 and 17-19 are pending for further prosecution in the present application. Arguments and amendments are provided to distinguish the claims over the prior art of record. No new matter was added. Accordingly, Applicant respectfully submits that the present application is in condition for allowance.

### **I. Claim Rejections - 35 USC §112**

*In the non-final Office Action dated August 23, 2011, claims 15 and 17 are rejected under 35 USC §112, fourth paragraph, as failing to provide a further limitation.*

The base independent claims, 1 and 7, require a Ni-Pt alloy “consisting” of Pt in a content of 0.1 to 20wt%, Ni and 0.01% or less of unavoidable impurities. The purpose of dependent claims 15 and 17 is to further limit this alloy to require an alloy “consisting” of 20wt% Pt, Ni and 0.01% or less of unavoidable impurities. Thus, instead of a Pt content of 0.1 to 20wt%, claims 15 and 17 further limit Pt content to 20wt%. Claims 15 and 17 have been amended accordingly. No new matter was added.

Applicant respectfully requests reconsideration and removal of the §112, fourth paragraph, rejection.

## **II. Claim Rejections - 35 USC §103(a)**

- A. In the non-final Office Action dated August 23, 2011, claim 1 is rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 2,269,497 issued to Vilensky.*

Independent claim 1 has been amended to include the limitation formerly stated in claim 16. No new matter was added. For this reason, Applicant respectfully requests reconsideration and removal of the rejection of claim 1.

- B. In the non-final Office Action dated August 23, 2011, claims 1 and 7 are rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 6,531,396 B1 issued to Chi et al. alone, or alternatively in view of U.S. Patent No. 6,238,494 issued to Segal.*

Independent claim 1 has been amended to include the limitation formerly stated in claim 16, and independent claim 7 has been amended to include the limitation formerly stated in claim 14. No new matter was added. For this reason, Applicant respectfully requests reconsideration and removal of the above cited rejection of claims 1 and 7.

- C. In the non-final Office Action dated August 23, 2011, claims 14 and 16 are rejected under 35 USC §103(a) as being obvious over U.S. Patent No. 6,531,396 B1 issued to Chi et al. in view of U.S. Patent No. 6,238,494 issued to Segal.*

Chi et al. disclose a process of sputtering a Ni-Pt alloy target.

However, as an alternative to the use of an alloy target, Chi et al. also disclose a process of co-sputtering a nickel target and a separate platinum target. The targets for co-sputtering are referred to as "pure" in an attempt to describe that these targets are not alloys.

In the Office Action, the term “pure” as used by Chi et al. is interpreted as follows.

“... ‘pure’ indicates only one material would be present and no impurities since the material would not be mixed with any other substance. A ‘pure’ material would not have a purity of 90 weight percent.”

Applicant respectfully disagrees and respectfully requests reconsideration. One of ordinary skill in the metallurgical arts uses the term “pure” to mean that it primarily consists of one intended metal element although it certainly will contain other elements as impurities. For example, one of ordinary skill in the art understands that so-called pure Fe, or so-called pure Al, or so-called pure Cu, etc., will always contain impurities even if the desired metal it is not intentionally mixed with other substances. Thus, the term “pure” to one of ordinary skill in the art does not mean that the purity of the metal is 100% (which is impossible with respect to the subject metals); rather, it simply means that the impurities are undesired and not intentionally added to the metal.

Accordingly, the purity of a Ni-Pt alloy produced by combining so-called “pure” Ni (which would inherently contain a given amount of impurities) and so-called “pure” Pt (which would also inherently contain a given amount of impurities) is not 100% and can never be 100%. Impurities will exist in the so-called “pure” alloy elements before mixing and new impurities will be added into the alloy as a result of the mixing process itself.

Applicant respectfully submits that the disclosure of Chi et al., when properly interpreted, fails to disclose the purity of a Ni-Pt alloy target and/or provide any significance thereto. Moreover, Chi et al. also fail to describe a manufacturing process and resulting structure which will also determine the characteristics (i.e., hardness, workability, etc.) of the alloy and target in addition to the composition and purity. Accordingly, the purity and structure produced due to the manufacturing process of the Ni-Pt alloy are not disclosed by Chi et al. and/or even

considered as important. Thus, Applicant respectfully submits that Chi et al. fail to make obvious to one of ordinary skill in the art, at the time the present invention was made, a Ni-Pt alloy target having a purity of 99.99% and a Vickers hardness of 40 to 90.

The present specification expressly describes the utility of the claimed target having a purity of 99.99% or higher (i.e., being able to inhibit the drastic rise in the hardness and prevent cracks from the grain boundary upon rolling the ingot – see page 3, lines 27-31, of the present application, as filed). Chi et al. fail to provide such a disclosure and utility to one of ordinary skill in the art. The feature of the claims of the present application requiring a “purity of 99.99% or higher” is not simply an improvement of purity level. The non-obviousness of the claims of the present application is not lost by the disclosure of Chi et al. (MPEP 2144.04 VII).

Accordingly, the claims of the present application are patentable and are not obvious over the Chi et al. patent.

Turning to the newly cited Segal patent, it discloses on column 1, line 61, to column 2, line 11, a manufacturing process based on a conventional melting and casting process and does not include a high purification process step in combination (see page 4, line 13-23, of the present application, as filed) as required by the present invention. Moreover, the melting and casting process of Segal is in relation to a Cr-Pt-Co alloy and is not expected to offer favorable ductility and workability to a Ni-Pt alloy ingot produced according to the steps for a Cr-Pt-Co alloy. Accordingly, Applicant respectfully submits that the manufacturing process disclosed by Segal cannot be applied (and it would not have been obvious to one of ordinary skill in the art to apply) to a Ni-Pt alloy. In fact, Segal on column 1, lines 61-64, **teaches-away** from use of the process on metals that do not “display good ductility and workability”. Conventional Ni-Pt alloys at the time the present invention was made would not have been an alloy that displayed good ductility

and workability and thus use of the process for a Ni-Pt alloy would have been avoided in accordance to the teachings of Segal.

Accordingly, Applicant respectfully submits that Chi et al. in view of Segal fail to produce or disclose a Ni-Pt alloy that would have a Vickers hardness of 40 to 90 as required by the claims of the present application. Therefore, Applicant respectfully submits that independent claims 1 and 7 are patentable and are not obvious over Chi et al. in view of Segal.

### **III. Allowable Subject Matter**

In the Office Action, claims 15 and 17 were stated as reciting patentable subject matter.

Applicant respectfully submits that claims 1 and 7 are patentable for reasons discussed above.

Applicant also submits that new claims 18 and 19 are in condition for allowance. Claim 18 includes the limitations stated in claim 1 and claim 17. No new matter was added.

### **IV. Conclusion**

In view of the above amendments and remarks, Applicant respectfully submits that the rejections have been overcome and that the present application is in condition for allowance.

Thus, a favorable action on the merits is therefore requested.

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